5

Abstract of the Disclosure

A planar waveguide grating device has a slab waveguide defining an input channel and a plurality of output channels. An echelle grating has a multitude of facets, each of the facets being blazed with respect to a preselected output channel. Each facet has an elliptical curvature so as to be astigmatic with respect to the input channel and the preselected output channel. The echelle grating is preferably based on a Rowland circle design. The astigmatic design of the facets reduces aberrations at high orders.